REMARKS

Claims 1, 8, 16, and 20 are amended, no claims are canceled, and no claims are added; as a result, claims 1-22 are now pending in this application.

Claim 20 was not amended in order to overcome a rejection based on prior art, but was amended to fix an obvious typographical error. Specifically, the amendment to claim 20 deleted the repeated word "wherein." Support for the amendments to claims 1, 8, and 16 can be found throughout the specification, for example on page 13, lines 1-12, and on page 15, line 8 through page 16, line 17. No new matter has been added through the amendments to claims 1, 8, 16, and 20.

Requirement for Information Under 37 C.F.R. 1.105

Pursuant to 37 C.F.R. 1.105, the Examiner has required that Applicant provide information deemed reasonably necessary for examination of the instant application.

Applicant is hereby providing a copy of the InfiniBand architecture specification (InfiniBand™ Architecture Specification, Release 1.1, November 6, 2002; http://www.infinibandta.org/specs/register/publicspec/) in an accompanying Information Disclosure Statement. See in particular pages 84-100 of volume 1.

§103 Rejection of the Claims

Claims 1-22 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Spiegel et al. (U.S. 5,649,108) in view of Haley (U.S. 5,884,036) and Golden et al. (WO 99/53719-A1).

The proposed combination of Siegel et al., Haley, and Golden et al. fails to teach or suggest all of the elements included in claims 1-22.

Applicant submits that independent claims 1, 8, and 16, as now amended, distinguish over the proposed combination of references of Spiegel et al., Haley, and Golden et al. For example, and not by way of limitation, claim 1 as amended now recites,

> identifying at least one alternative path to the path if an alternative path exists, wherein the alternative path has as few overlapping switches and links with the path as the physical topology allows;

obtaining respective detailed information on properties of each of
the fundamental path elements, <u>including detailed information on
properties of the fundamental path elements of the at least one alternative
path</u>; and

sending a response to the client based on the request, the response
providing the information on the properties for the fundamental path
elements of the path <u>and the at least one alternative path if one exists,</u>
including one or more links between the source and the destination.
[Emphasis added].

Thus, claim 1 now includes elements related to identifying a path and identifying an
alternative path if one exists, in a cluster, obtaining detailed information on the properties of each
of the fundamental path elements in the at least one alternative path if one exists, and sending a
response to the client providing information on the properties of the fundamental elements in the
at least alternative path, wherein the at least one alternative path has as few overlapping switches
and links with the path as the physical topology allows.

In contrast, Spiegel et al. at column 6, lines 50-52, discloses, "Control proceeds to step 41
to search the routing table for an entry with the shortest path, i.e., a path having the least total
cumulative cost." Spiegel et al. only discloses determining an alternative path if enough
resources are not available along the chosen path. (*See* Spiegel et al. at column 7, lines 1-12 and
lines 51-62.) However, the "resources" Spiegel et al. is concerned with involve Quality of
Service requirements, wherein Spiegel et al. at column 7, lines 1-4 states, "After executing step
43 or 45, control proceeds to decision step 46 to provide call admission control on the request by
checking to see if enough resources are available over the next hop to satisfy the QOS
requirements."

Hence, Spiegel et al. chooses a path based on the least total cumulative cost, with
alternatives based on the availability of Quality of Service resources, but fails to teach or suggest
an alternative path "wherein the alternative path has as few overlapping switches and links with
the path as the physical topology allows," as recited in amended claim 1. Thus, Spiegel et al.
fails to teach or suggest all of the elements recited in claim 1.

Applicant's representatives have carefully reviewed the references of Haley and Golden
et al., and fail to find in either Haley or in Golden et al. a teaching or suggestion of the elements
included in amended claim 1, as quoted above and missing from Spiegel et al. Therefore, the

proposed combination of Spiegel et al., Haley, and Golden et al. fails to teach or suggest all of

the elements included in amended claim 1. Because the proposed combination of references fails

to teach or suggest all of the elements included in amended claim 1, the 35 U.S.C. § 103 (a)

rejection of claim 1 cannot stand.

Claims 8, as amended, now recites,

a topographical discovery service coupled to the fabric, the service
operative to discover properties of fundamental path elements of the fabric
without modification of the path elements, including the path links,
including identification of links and switches traversed in a path and in at
least one alternative path, if one exists, wherein the alternative path has as
few overlapping switches and links with the path as the physical topology
allows, the discovery to include identify all fundamental path elements of
the path and the at least one alternative path, and including respective
detailed information on properties of each of the fundamental path
elements; and
wherein the service is operative to send a response based on a
request from a client for information on the properties of the fundamental
path elements of the path and the at least one alternative path if one exists;
wherein the request identifies at least a source and a destination of
a path; and
wherein the response providing the information on the properties
for the fundamental path elements of the path, including one or more links
between the source and the destination. [Emphasis added].

Claim 16, as amended, now recites,

identifying at least one alternative path to the path, wherein the
alternative path has as few overlapping switches and links with the path as
the physical topology allows;
obtaining respective detailed information on properties of each of
the fundamental path elements, including detailed information on
properties of the fundamental path elements of the at least one alternative
path; and
sending a response to the client based on the request, the response
providing the information on the properties for the fundamental path
elements of the path and the at least one alternative path, including one or
more links between the source and the destination. [Emphasis added].

For reasons analogous to those stated above with regards to claim 1, Applicant submits that claims 8 and 16, as amended, now include elements not taught or suggested in the proposed combination of Siegel et al., Haley, and Golden et al.

In addition, claims 2-7, claims 9-15, and claims 17-22 depend from claims 1, 8, and 22 respectively, and therefore include all of the elements recited in the claim from which they depend. Thus, the proposed combination of Siegel et al., Haley, and Golden et al. fails to teach or suggest all of the elements included in dependent claims 2-7, 9-15, and 17-22.

Since the proposes combination of Siegel et al., Haley, and Golden et al. fails to teach or suggest all of the elements included in claims 1-22, the 35 U.S.C. § 103(a) rejection of claims 1-22 cannot stand.

The Office Action fails to provide a proper basis for forming the proposed combination of the Siegel et al., Haley, and Golden et al. references, and thus fails to state a prima facie case of obviousness with respect to claims 1-22.

The Examiner has the burden under 35 U.S.C. § 103 to establish a *prima facie* case of obviousness. *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). To do that the Examiner must show that some objective teaching in the prior art or some knowledge generally available to one of ordinary skill in the art would lead an individual to combine the relevant teaching of the references. *Id.*

The *Fine* court stated that:

> Obviousness is tested by "what the combined teaching of the references would have suggested to those of ordinary skill in the art." *In re Keller*, 642 F.2d 413, 425, 208 USPQ 871, 878 (CCPA 1981)). But it "cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination." *ACS Hosp. Sys.*, 732 F.2d at 1577, 221 USPQ at 933. And "teachings of references can be combined *only* if there is some suggestion or incentive to do so." *Id.* (emphasis in original).

In an attempt to meet these requirements, the Office Action on page 4 states,

> It would have been obvious to include a topology information request in the system of Spiegel et al because this would have allowed for quick network topology determination. Golden et al teaches maintaining a network map of the paths as well as the bandwidth capabilities of all links and switches along the paths (Abstract). It would have been obvious to a

person of ordinary skill in the art at the time of the invention to include the properties of the switches in the path because this would have provided for handling changes in switch bandwidth.

Applicant disagrees. With regards to the proposed combination of Spiegel et al. and Haley, the Office Action fails to point out where either reference is concerned with making a "quick network topology determination," as stated in the Office Action. Further, Applicant submits that receiving any additional topology information requests as recited in the Abstract of Haley may actually slow the process of determining the network topology, since additional information beyond the simple layout of the network is being requested. Thus, reasons given in the Office Action for forming the proposed combination of Spiegel et al. and Haley are not supported by the references themselves, and so the Office Action fails the meet the requirements of the *Fine* court in forming the proposed combination of Spiegel et al. and Haley.

With regards to the proposal to combine Golden et al. with Spiegel et al. and Haley, the Office Action fails to point out where Spiegel et al. and Haley are concerned with handling changes in switch bandwidth. Therefore, the statements in the Office Action appear to be established by merely combining the teaching of the references to produce the claimed invention, which directly violates the dictates of the *Fine* court.

Since the Office Action fails to meet the requirements provided by the *Fine* court in forming the proposed combination of the Spiegel et al., Haley, and Golden et al. references, the Office Action fails to establish a *prima facie* case of obviousness with respect to claims 1-22.

For at least the reasons stated above, Applicant respectfully requests the withdrawal of the rejection, and reconsideration and allowance of claims 1-33.

Reservation of Rights

Applicant does not admit that references cited under 35 U.S.C. §§ 102(a), 102(e), 103/102(a), or 103/102(e) are prior art, and reserves the right to swear behind them at a later date. Arguments presented to distinguish such references should not be construed as admissions that the references are prior art.

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111
Serial Number: 09/694,492
Filing Date: October 24, 2000
Title: SYSTEM AND METHOD FOR PROVIDING DETAILED PATH INFORMATION TO CLIENTS
Assignee: Intel Corporation

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Dkt: 884.B37US1 (INTEL)

Conclusion

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney ((612) 371-92132) to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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Date ___OCT. 24/2005___   By ___*Robert B. Madden*___
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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this __24__ day of October, 2005.

___ROBERT B. MADDEN___   ___*Robert B. Madden*___

Name   Signature